

In the Abstract:

Please amend the heading at page 22, line 1, as follows:

ABSTRACT OF THE DISCLOSURE

Please amend the paragraph at page 22, lines 2 to 20, as follows:

1. Arrangement of a heating layer for a high temperature gas sensor.

2.1 In known high temperature gas sensors, the operating temperature on the functional layer of the sensor can neither be exactly adjustingly set or measured, nor exactly regulated. The new arrangement shall make it possible to exactly adjustingly set the working temperature in a surface covering manner in the functional layer of the sensor.

2.2 For adjustingly setting an exact working temperature over the entire functional layer, the heating conductor path, which is arranged under the functional layer, is constructed in such a manner, so that it comprises various different partial heating resistances in the various regions, in that the path length and/or the width of the heating conductor path is varied from partial section to partial section.

2.3 Such arrangements are required especially for high temperature gas sensors, which are utilized in the exhaust gas of a combustion engine.

*C/S
end*

The operating temperature of a gas sensor capable of sensing a gas or a gas composition at a high temperature, for example 1000°C, is maintained constant over the entire volume of a gas sensor layer or function layer (4) secured to a sensor carrier section of the gas sensor by supplying heat to the gas sensor layer (4) in such a way that varying heat dissipations in the sensor carrier section are compensated. For this purpose, an electrical heater for heating the gas sensor layer (4) has individual heater sections with different heating resistance values which depend on a spacing between any individual heater section and the tip of the sensor carrier section.

<RESPONSE CONTINUES ON NEXT PAGE>